



National Nutrient Database for Standard Reference

Release 28 slightly revised May, 2016

Statistics Report 11011, Asparagus, raw

Report Date: July 04, 2017 20:04 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Proximates													
Water ¹	g	93.22	1	--	92.62	93.7	7.0	--	--	4	Aggregated data involving comb. of codes other than 1,12 or 6	--	12/2002
Energy	kcal	20	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2007
Energy	kJ	85	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2007
Protein ¹	g	2.20	4	0.023	2.14	2.25	3.0	2.125	2.275	1	derived from analytical	--	03/2006
Total lipid (fat) ¹	g	0.12	6	0.014	0	0.22	3.0	0.078	0.165	2	Aggregated data involving comb. of codes other than 1,12 or 6	--	12/2002
Ash ¹	g	0.58	4	0.009	0.56	0.6	3.0	0.555	0.61	1	derived from analytical	--	12/2002
Carbohydrate, by difference	g	3.88	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2007
Fiber, total dietary	g	2.1	4	--	--	--	--	--	--	--	Analysed or derived from analytical	--	12/2002
Sugars, total	g	1.88	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Sucrose ¹	g	0.23	5	0.193	0.03	1	4.0	-0.31	0.763	2	Aggregated data involving combinations of source codes 1 & 12	--	12/2002
Glucose (dextrose) ¹	g	0.65	6	0.105	0.32	1.02	5.0	0.382	0.924	3	Aggregated data involving combinations of source codes 1 & 12	--	12/2002
Fructose ¹	g	1.00	6	0.102	0.68	1.4	5.0	0.743	1.267	3	Aggregated data involving combinations of source codes 1 & 12	--	12/2002
Lactose ¹	g	0.00	4	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Maltose ¹	g	0.00	4	0.000	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Galactose	g	0.00	--	--	--	--	--	--	--	Assumed zero	--	--	12/2002
Minerals													
Calcium, Ca ¹	mg	24	4	1.276	22	28	3.0	20.239	28.361	1	Analytical or derived from analytical	--	12/2002
Iron, Fe ¹	mg	2.14	4	1.353	0.74	6.2	3.0	-2.165	6.447	1	Analytical or derived from analytical	--	12/2002
Magnesium, Mg ¹	mg	14	4	0.388	13	15	3.0	12.614	15.086	1	Analytical or derived from analytical	--	12/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Phosphorus, P 1	mg	52	4	0.492	51	53	3.0	50.136	53.264	1	Analytical or derived from analytical	--	12/2002
Potassium, K 1	mg	202	4	8.357	192	227	3.0	175.405	228.595	1	Analytical or derived from analytical	--	12/2002
Sodium, Na	mg	2	17	0.257	--	--	--	--	--	--	-- derived from analytical	--	08/1984
Zinc, Zn 1	mg	0.54	4	0.021	0.49	0.6	3.0	0.476	0.611	1	Analytical or derived from analytical	--	12/2002
Copper, Cu 1	mg	0.189	4	0.028	0.12	0.24	3.0	0.102	0.277	1	Analytical or derived from analytical	--	12/2002
Manganese, Mn 1	mg	0.158	4	0.015	0.14	0.2	3.0	0.11	0.206	1	Analytical or derived from analytical	--	12/2002
Selenium, Se	µg	2.3	2	--	--	--	--	--	--	--	-- derived from analytical	--	12/1992
Vitamins													
Vitamin C, total ascorbic acid 1	mg	5.6	4	0.210	5.2	6.2	3.0	4.981	6.319	1	Analytical or derived from analytical	--	03/2006
Thiamin 1	mg	0.143	4	0.016	0.1	0.17	3.0	0.091	0.194	1	Analytical or derived from analytical	--	12/2002
Riboflavin 1	mg	0.141	4	0.007	0.13	0.16	3.0	0.119	0.163	1	Analytical or derived from analytical	--	12/2002
Niacin 1	mg	0.978	4	0.034	0.89	1.03	3.0	0.869	1.088	1	Analytical or derived from analytical	--	12/2002
Pantothenic acid 1	mg	0.274	4	0.020	0.23	0.32	3.0	0.211	0.338	1	Analytical or derived from analytical	--	12/2002
Vitamin B-6 1	mg	0.091	4	0.009	0.07	0.11	3.0	0.062	0.12	1	Analytical or derived from analytical	--	12/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Folate, total ¹	µg	52	4	6.390	40	70	3.0	31.89	72.56	1	Analytical or derived from analytical	--	03/2006
Folic acid	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	52	4	6.390	40	70	3.0	31.89	72.56	1	Analytical or derived from analytical	--	03/2006
Folate, DFE	µg	52	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/2007
Choline, total ¹	mg	16.0	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Betaine ¹	mg	0.6	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Vitamin B-12	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	08/1984
Vitamin B-12, added	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Vitamin A, RAE	µg	38	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2007
Retinol	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	06/2002
Carotene, beta ^{2 3}	µg	449	6	76.317	317	581	2.0	120.819	777.551	1	Analytical or derived from analytical	--	12/2002
Carotene, alpha ^{2 3}	µg	9	6	5.026	0	17	2.0	-12.919	30.329	1	Analytical or derived from analytical	--	12/2002
Cryptoxanthin, beta ²	µg	0	27	--	0	0	--	--	--	1	Analytical or derived from analytical	--	12/2002
Vitamin A, IU	IU	756	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/2007
Lycopene	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	12/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Lutein + zeaxanthin	µg	710	--	--	--	--	--	--	--	--	Calculated or imputed	11012	12/2002
Vitamin E (alpha-tocopherol)	mg	1.13	2	--	0.98	1.27	1.0	--	--	1	Analytical or derived from analytical	--	03/2006
Vitamin E, added	mg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Tocopherol, beta	mg	0.00	2	--	0	0	--	--	--	1	Analytical or derived from analytical	--	03/2006
Tocopherol, gamma	mg	0.09	2	--	0.07	0.11	1.0	--	--	1	Analytical or derived from analytical	--	03/2006
Tocopherol, delta	mg	0.00	2	--	0	0	--	--	--	1	Analytical or derived from analytical	--	03/2006
Vitamin D (D2 + D3)	µg	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	--	--	--	--	--	--	Assumed zero	--	02/2009
Vitamin K (phylloquinone) ¹	µg	41.6	4	2.704	34.3	47	3.0	33.007	50.218	1	Analytical or derived from analytical	--	12/2002
Lipids													
Fatty acids, total saturated	g	0.040	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
4:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
6:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
8:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
10:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
12:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
14:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
15:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
16:0 ¹	g	0.040	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
17:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
18:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
24:0 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Fatty acids, total monounsaturated	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
14:1 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
15:1 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
16:1 undifferentiated ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
17:1 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
18:1 undifferentiated ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:1 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:1 undifferentiated ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Fatty acids, total polyunsaturated	g	0.050	--	--	--	--	--	--	--	--	Calculated or imputed	--	03/2006
18:2 undifferentiated ¹	g	0.040	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
18:3 undifferentiated ¹	g	0.010	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
18:4 ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:2 n-6 c,c ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:3 undifferentiated ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:4 undifferentiated ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
20:5 n-3 (EPA) ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:5 n-3 (DPA) ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
22:6 n-3 (DHA) ¹	g	0.000	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Fatty acids, total trans	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	06/2015

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Cholesterol	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	08/1984
Phytosterols	mg	24	1	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1984
Amino Acids													
Tryptophan ¹	g	0.027	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Threonine ¹	g	0.084	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Isoleucine ¹	g	0.075	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Leucine ¹	g	0.128	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Lysine ¹	g	0.104	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Methionine ¹	g	0.031	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Cystine ¹	g	0.031	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Phenylalanine ¹	g	0.075	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Tyrosine ¹	g	0.052	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Valine ¹	g	0.115	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Arginine ¹	g	0.091	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Histidine ¹	g	0.049	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Alanine ¹	g	0.115	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Aspartic acid ¹	g	0.508	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Glutamic acid ¹	g	0.233	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Glycine ¹	g	0.093	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Proline ¹	g	0.071	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Serine ¹	g	0.106	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	03/2006
Other													
Alcohol, ethyl	g	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	04/1985
Caffeine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	12/2002
Theobromine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	12/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Flavonoids													
Flavonols													
Isorhamnetin ⁴	mg	5.7	--	0.91	0.46	10.28	--	--	--	--	--	--	--
Kaempferol ^{4 5}	mg	1.4	--	0.44	0	5.2	--	--	--	--	--	--	--
Myricetin ⁵	mg	0.0	--	--	0	0	--	--	--	--	--	--	--
Quercetin ^{4 5 6 7 8}	mg	14.0	--	0.91	0.05	28.72	--	--	--	--	--	--	--
Isoflavones													
Daidzein ^{9 10}	mg	0.03	--	--	0	0.06	--	--	--	--	--	--	--
Genistein ^{9 10}	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Total isoflavones ^{9 10}	mg	0.03	--	--	0	0.06	--	--	--	--	--	--	--
Biochanin A	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Formononetin	mg	0.00	--	--	0	0	--	--	--	--	--	--	--
Coumestrol	mg	0.05	--	--	0.05	0.05	--	--	--	--	--	--	--

Sources of Data

¹Nutrient Data Laboratory, ARS, USDA National Food and Nutrient Analysis Program Wave 6h, 2002 Beltsville MD

²J L Bureau, R J Bushway HPLC determination of carotenoids in fruits and vegetables in the United States, 1986 J Food Sci 52 pp.128-130

³R J Bushway Determination of alpha- and beta-carotene in some raw fruits and vegetables by high-performance liquid chromatography, 1986 J Agric Food Chem 34 pp.409-412

⁴Fuentes-Alventosa, J. M., Rodríguez, G., Cermeño, P., Jiménez, A., Guilén, R., Fernández-Bolaños, J., and Rodríguez-Arcos, R. Identification of flavonoid diglycosides in several genotypes of asparagus from Huétor-Tájar population variety, 2007 J. Agric. Food Chem. 55 pp.10028-10035

⁵Kevers, C., Falkowski, M., Tabart, J., Defraigne, J.-O., Dommes, J., and Pincemail, J. Evolution of antioxidant capacity during storage of selected fruits and vegetables, 2007 J. Agric. Food Chem. 55 pp.8596-8603

⁶Fanasca, S., Rouphael, Y., Venneria, E., Azzini, E., Duazzo, A., and Maiani, G. Antioxidant properties of raw and cooked spears of green asparagus cultivars., 2009 Int. J. Food Sci. Technol. 44 pp.1017-1023

⁷Makris, D.P. and Rossiter, J.T. Domestic processing of onion bulbs (*Allium cepa*) and asparagus spears (*Asparagus officinalis*): Effect on flavonol content and antioxidant status, 2001 J. Agric. Food Chem. 49 7 pp.3216-3222

⁸Sakakibara, H., Honda, Y., Nakagawa, S., Ashida, H., and Kanazawa, K. Simultaneous determination of all polyphenols in vegetables, fruits, and teas, 2003 J. Agric. Food Chem. 51 3 pp.571-581

⁹Horn-Ross, P. L., Barnes, S., Lee, M., Coward, L., Mandel, E., Koo, J., John, E. M., and Smith, M. Assessing phytoestrogen exposure in epidemiologic studies: development of a database (United States), 2000 Cancer Causes and Control 11 pp.289-298

¹⁰Liggins, J., Bluck, L. J. C., Runswick, C., Atkinson, C., Coward, W. A., and Bingham, S. A. Daidzein and genistein content of vegetables., 2000 Brit. J. Nutr. 84 pp.717-725